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**Palik**

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(54) **DIGITAL READ-OUT INTEGRATED CIRCUIT WITH MODULATED LIGHT SOURCE REJECTION**

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CPC ..... **H04N 5/378** (2013.01); **H04N 5/376** (2013.01); **H04N 5/37452** (2013.01)

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See application file for complete search history.

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#### (57) **ABSTRACT**

According to one aspect, embodiments herein provide a digital pixel circuit comprising a detector configured to discharge a well capacitor when voltage across the well capacitor exceeds a threshold, a DROIC configured, in a first mode, to increment a reset counter when the well capacitor is discharged, and in a second mode, to ignore the discharging of the well capacitor, and a processing unit configured to monitor a count rate of the DROIC, transmit a signal at a first level when the count rate is less than a threshold, and transmit a signal at a second level when the count rate is greater than the threshold, wherein, the DROIC is further configured, in response to receiving the signal at the first level, to operate in the first mode, and in response to receiving the signal at the second level, to operate in the second mode.

**20 Claims, 4 Drawing Sheets**

